Name: _____ **Date: _____**

Algebra 1B Pd _____

Weekend Word Problem #5: Quacky Oinkers

The Situation: Oliver and Jakai are running a farm, which they named Quacky Oinkers, that has a certain number of ducks and a certain number of pigs, for a total of eighty-three animals and a total of two hundred eighty-eight animal legs. Assuming that each duck has two legs and each pig has four legs, use a system of linear equations to find out how many ducks and how many pigs live on Quacky Oinkers.
1. Define variables that make sense for the situation.
2. Write a system of equations.
3. Solve the system of equations using either graphing, substitution or elimination. SHOW all work and use SUBSTITUTION to check your solution.

4. How many ducks are on Oliver and Jakai's farm, Quacky Oinkers? _____

5. How many pigs are on Oliver and Jakai's farm, Quacky Oinkers? _____

6. Which method did you choose to solve the system? Why did you choose this method? Be specific, write at least TWO complete sentences and use at least TWO algebraic terms.

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Name: _____ **Date: _____**

Algebra 1B Pd _____

Weekend Word Problem #5: Quacky Oinkers

The Situation: Oliver and Jakai are running a farm, which they named Quacky Oinkers, that has a certain number of ducks and a certain number of pigs, for a total of **eighty-three (83) animals** and a total of **two hundred eighty-eight (288) animal legs**. Assuming that each duck has two legs and each pig has four legs, use a system of linear equations to find out how many ducks and how many pigs live on Quacky Oinkers.

1. Define variables that make sense for the situation.

Let p = number of _____ *Let d = number of* _____

2. Fill in the system of equations.

d + p = _____ *(total number of animals)*

2d + 4p = _____ *(total number of legs)*

3. Solve the system of equations using either graphing, substitution or elimination. SHOW all work and use SUBSTITUTION to check your solution.

4. How many ducks are on Oliver and Jakai's farm, Quacky Oinkers? _____

5. How many pigs are on Oliver and Jakai's farm, Quacky Oinkers? _____

6. Which method did you choose to solve the system? Why did you choose this method? Be specific, write at least TWO complete sentences and use at least TWO algebraic terms.

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